emotional, and the vomiting was unusually frequent, and did not respond to treatment applicable to gastric ulcer, it was suggested that there was a marked nervous element to be dealt with. The patient was accordingly put on drachm doses of potassium bromide by the rectum four times a day, and in thirty-six hours the vomiting, which was previously increasing in severity, had entirely ceased. In four days more she was successfully taking solid food by the mouth, and in a fortnight was discharged cured.

She remained in good health a year, when the pain and vomiting suddenly returned, and she was re-admitted on January 28, 1898. The symptoms were exactly the same as in the previous year; the vomiting being almost incessant, the vomit consisting of clear, bile-stained liquid, frequently containing traces of blood. In this attack, however, the treatment by rectal feeding, bromide and morphia was absolutely inoperative. The vomiting increased, the pulse became rapid and feeble, and in twelve days the patient died, the end being accelerated by an attack of uncontrollable diarrhea with offensive stools.

The necropsy revealed absolutely no lesion except a catarrhal inflammation of the lower end of the ileum, which, no doubt, accounted for the terminal diarrhea. The stomach was perfectly healthy, except for a few submucous hemorrhages. There was no ulceration, erosion, or atrophy of the mucous membrane. The liver, kidneys and other organs were all healthy.

It is not stated that the nervous system was examined, and apparently no microscopic examination was made at all. PATRICK.

96. EIN EXPERIMENTELLER BEITRAG ZUR FRAGE DER PERIPHEREN DEGENERATIVEN NEURITIS BEI TUBERCULOSE (An Experimental Contribution to the Question of Degenerative Peripheral Neuritis in Tuberculous Persons). Carl Hammer (Deutsche Zeitschrift für Nervenheilkunde, 12, 1898, p. 215).

Neuritis has been so frequently found in persons suffering from tuberculosis that there must be some relation between the two diseases. Hammer found that he was not able to produce neuritis in guinea pigs, in every case, by the injection of cultures of the tubercle bacilli. When the material for inoculation was taken from a tuberculous human peritoneum the results were very different, and the nerves were found markedly degenerated. The material from the human peritoneum seems, therefore, to be more virulent. He found, also, that tuberculosis in guinea pigs, produced by any form of inoculation, invariably causes changes in the spinal motor cells of guinea pigs, detectable eight days after the inoculation, and in some cases sufficiently intense to cause death of the cells. Hammer believes that the neuritis found in man in tuberculosis and other infectious diseases is probably secondary to changes in the cells. SPILLER.

97. UEBER DAS WESEN UND DIE ENTSTEHUNG DER HEMIPLEGISCHEN CONTRACTUR (Concerning the Nature and Origin of Hemiplegic Contracture). Ludwig Mann (Monatsschrift für Psychiatrie und Neurologie, Vol. IV, Nos. 1 and 2, pp. 45 and 123).

The theories which are used to explain contracture by the loss of the inhibition transmitted through the pyramidal tract, or by the stimulation of the cells of the anterior horns from secondary degeneration of these tracts, are very unsatisfactory. In hemiplegia the paralysis and contracture affect distinct groups of muscles. The muscles which are completely paralyzed are not contractured, and their passive mobility is exaggerated; the antagonizing muscles of these groups, however, which have preserved their voluntary movement relatively well, are contractured. Mann suggests that possibly the excitomotor fibers of each muscular group are closely associated, or identical, with the inhibitory fibers of its antagonizing group. In the lower extremity in hemiplegic cases the contracture exists in those muscles which extend the limb, which "lengthen" it, and in these muscles power is relatively well preserved. In the upper limb the extensors are paralyzed and the flexors are movable voluntarily to a certain degree. The hemiplegic contracture is not the same as the contracture from peripheral cause. The hemiplegic contracture is due, not only to the innervation of the relatively well preserved antagonizing muscles, but also to the destruction of the inhibitory fibers to these same antagonizing muscles. Hering and Sherrington found that inhibition—recognized by flaccidity of a previously contracted muscle—could always be obtained by feeble irritation of that part of the cortex from which stronger irritation caused contraction of the antagonizing muscles; for example, when feeble irritation of the cortex caused relaxation of the biceps, stronger irritation of the same part caused contraction of the triceps with relaxation of the biceps. Hering and Mann say that the contraction of a muscle is usually associated with relaxation of its antagonist, contrary to the view of Duchenne, who held that in every contraction of a muscle a simultaneous contraction of its antagonist occurs, enabling the latter to act as a moderator in the movement. It is true that when a limb is held firmly in a certain position the antagonists are also contracted.

When one of two groups of muscles which act together is paralyzed peripherally, the other group is thrown into excessive action by voluntary attempts to innervate the paralyzed group; thus, when the extensor digitorum communis is paralyzed, attempts to extend the fingers have been found to cause flexion at the wrist joint; or when the interossei and flexors of the fingers are paralyzed, attempts to innervate these paralyzed muscles have caused extension at the wrist joint. In these cases the antagonizing muscles are not innervated in attempts to control the paralyzed muscles; for example, the fingers are not extended by efforts to flex the fingers when the flexors are paralyzed, which would be the case if Duchenne's views regarding the simultaneous innervation of opposing groups of muscles on voluntary movement were correct.

The simultaneous innervation of associated groups of muscles is probably of cortical origin.

When a limb is cut off entirely from its cortical centers, as seen in transverse lesions of the cord, the paralysis is flaccid. In rare cases of hemiplegia the arm is completely paralyzed; in these cases the flaccidity is complete. Secondary rigidity in hemiplegia develops simultaneously with the restoration of a certain amount of power in the paralyzed limbs. In rare cases of hemiplegia the muscles which have retained a certain amount of movement do not exhibit hypertonia; in such cases possibly the spinal cells or centripetal tracts are affected.

SPILLER.

98. A FORM OF NEURALGIA OCCURRING IN CYCLISTS. W. H. Brown (Brit. Med. Jour., February 26, 1898).

The author describes a condition of extreme pain and tenderness of the perineum, scrotum, testicles and sometimes of the penis and inner surface of the thighs, that occurs after prolonged, and especially